

**Translation of the First Office Action dated September 22, 2006, regarding German Patent  
Application 11 2004 001 447.6-33**

In this Office Action the following references are mentioned for the first time. (In case of their numbering this applies also to further proceedings):

- 1) JP 9-232 629 A
- 2) US 5 929 466 A
- 3) DE 102 13 395 A1
- 4) WO 02/103 814 A1
- 5) KR 10 2002 00 79 659 A
- 6) WO 2004/114 421 A1

The examination is based on the documents filed in the German language on March 1, 2006, for the national phase of PCT application published under WO 2005/038937 A1, in particular, it is based on claims 1 to 38.

I.

It has not become clear to the Examining Division what the invention consists of and which object it is based upon. Thus, the Examining Division cannot recognize a common solution or problem with the several independent claims. For instance, except the usual double hetero-structure comprising two electrode contact layers and an active layer there are no common features between the subject-matters of claims 1 and 38. Such a structure is already described as prior art in the section background art. This means that the subject application lacks unity.

Considering the several independent claims and starting from the usual structure three essential points can be recognized which are actually not related with each other and which, according to the opinion of the Examining Division, also objectively solve different problems. These are:

1. Insertion of cluster layers (claims 1, 24, 34, 35, 36).
2. Insertion of a strain control layer (claims 35, 36, 37)
3. Embodiment as a npn-structure (claims 34, 35, 36, 37, 38)